Living Atlas 1 Sprint 4 - Report

Long, Joshua
Kolb, Mitchell, William
Svetlik, Sierra Amelia

Introduction

This sprint started on August 21st and ended on September 17th. This sprint focused on adding relevant data to the database and implementing a system to upload and download files from a saved place in the file server. Additionally we have started the integration process where the living atlas map team will begin merging their codebase with ours.

Retrospection of Last Sprint

Long, Joshua
In our last sprint, the Living Atlas project marked a significant milestone by successfully integrating the Frontend, Backend, and Database to produce a unified web application. However, it was clear that we still have areas to address, most notably the absence of core functionalities like the file server. As a person responsible for the front end I successfully implemented the 'get' request functionality and, more importantly, could effectively format the retrieved data into well-structured cards.

Kolb, Mitchell, William
Looking back at the last sprint I helped complete the main goal that our was working towards since the first sprint which was having one seamless application that had the ability to pass information from the frontend to the backend to the database. Completing that marks a huge accomplishment in our team and in the project because that takes care of the main functionality of the website. My backend communicates efficiently with the front end when requests are sent in and with the database with reading/writing data. We still have some more hurdles to get over but this last sprint shows me that our team has the ability to complete this project.

Svetlik, Sierra Amelia
During the third sprint I was assigned the tasks of adding the tags table and adding fake data to the database in order to help my teammates with testing data retrieval. This helped the project because adding the tags table would allow for categorizing potential data, which means users would have an easier time finding the data that they are interested in. Adding fake, or dummy, data to the database helps the team because it will allow for testing the frontend and the API for retrieving information from the database. While the tags table was, and still is, an ongoing task, the dummy data successfully helped with testing the application. Once the frontend, the API, and the database were all connected, data was successfully retrieved and output in the application. The tags table still needs refinement in order for it to be useful and efficient.

Result of Sprint - 4 Planning

Long, Joshua
For this sprint, we had two clear objectives. First, we needed to communicate more effectively with the other Living Atlas team about integration, ensuring that all systems and functionalities mesh well together. Our second goal was to address the file server. This component is crucial to our project's infrastructure, and focusing on its completion will be one of the most important milestones for the Living Atlas project.

Kolb, Mitchell, William
My task this sprint is to implement a file server so we can attach files to each card. I'm supposed to find a way to store the files and then create endpoints so there can be functionality for uploading files, downloading files, and searching for files. My other task is to create endpoints for filtering the cards based on tags.

Svetlik, Sierra Amelia
This sprint I planned for refining the database as needed. Whether that would be changing existing tables, adding new tables, or even deleting tables if that was necessary. One part of that was changing the tags table since that seemed inefficient.

Sprint Task Assignment

Long, Joshua

1. FrontEnd - communicate with the other team about integration

2. FrontEnd - complete a Get request for the file server

For this sprint, I will have two sprint tasks. Integrating the app with the other team and the completion of the file server.

Kolb, Mitchell, William
1. Backend - File Server
   a. Uploading
   b. Downloading
   c. Searching
2. Backend - Tag Filters

For this sprint, I will have two sprint tasks. Developing the file server for the website and filtering cards based on user selected filters.

Svetlik, Sierra Amelia

1. Database - Change tags table
2. Database - Add data_tags table
3. Database - Refine tables

For this sprint, I have 3 tasks. Changing the tags table and adding the data_tags table since the schema has changed, as well as refining other tables as needed.

Sprint Task(s) Details

Long, Joshua

1. **FrontEnd - communicate with the other team about integration**

   We had a meeting with the other team and we spotted overlapping tasks and promptly clarified roles to prevent duplication. To ensure a unified approach, I shared instructions on starting my React application.

2. **FrontEnd - complete a Get request for the file server**

   To enable file downloading, I've designed a button within our card layout that, when clicked, triggers a GET request to a specific backend endpoint. I accomplished this by utilizing Axios to send the GET request and then processed the returned data to be in a downloadable format.

Kolb, Mitchell, William

1. **Backend - File Server**

   To satisfy this task I will implement a way to save files and retrieve files. To save files I have to determine if I want to save them in the machine that is running the backend or save them directly in the database. Each option has their own pros and cons that I will have to evaluate. For uploading and downloading I have to make endpoints that accept certain parameters so I can send/receive files. For searching for files I have to make an endpoint that searches for files based on card identifiers.

2. **Backend - Tags Filter**

   To satisfy this task I will implement an endpoint that retrieves a master list of tag labels that will be shown in the drop down menu button. I have to do this because tags can be custom so they can't be hardcoded into the frontend. Then to complete the filter of tags I

just have to create an endpoint that queries the database for cards that have the desired tags.

Svetlik, Sierra Amelia

1. **Database - Change tags table**

   Since the schema has changed to match how other apps allow for categorization of data, the tags table will need to be changed to hold the tids (tag ids) and the names of the tags themselves. The data_tags table will then call this table for the names of the tags. This table will allow for efficiently retrieving information about the tags.

2. **Database - Add data_tags table**

   Also because of the change to the schema, a new table will need to be added. The data_tags table will hold tuples of dids (data ids) and tids (tag ids). This is the most efficient method of storing the tags associated with the data. It will also involve modifying sample code written to query the table.

3. **Database - Refine tables**

   There are other modifications that need to be made to the database, not all of which are clear. Since the client has stated that they might not be interested in MFA, the users table may not need to hold a phone number for the user. The map table will hold map related information, so other tables may not need to hold the latitude and longitude. And the data table also does not need the website column. There are other changes that need to be done, and may come up as the project progresses.

Minutes of Meeting

Meeting Date and Time: Monday August 21st 5pm

Attendees: Mitchell, Josh, Sierra, Prof. Subu, Jan Boll

Agenda:

- Reintroduction of the project since the last time our team and the client have met.
- Go over goals that we have this semester and our initial plans on how we are going to finish the project

Meeting Notes:

- This meeting was intended to be a reintroduction to the work that the living atlas database team worked on last semester. This meeting was around 20 minutes and the three of us started by going through the presentation that we made at the end of sprint 3 to wrap up the project at the time. After we went through the presentation we had a live showcase of the website in its current state. Josh displayed his frontend, Mitchell displayed his backend and database. After this we all talked about our potential goals and where we see the project going this fall.

Action Items/Postponed-Items:

- Action Items:
    - The entire team will plan on finishing the functionality of the website (ETA end of sprint 1)
    - Josh will begin implementing the frontend with the living atlas map team (ETA end of sprint 1)
- Postponed Items:
    - NA

Miscellaneous:

- Jan Boll took notes and screenshots during the meeting with the intention of sending them over to Julie Padowski so she can be caught up with how the project is going when we meet with her next time.

Meeting Date and Time: Thursday September 14th 3:30pm

Attendees: Mitchell, Josh, Sierra, Jan Boll, Julie Padowski

Agenda:

- Show the client the new file server functionality that allows files to be attached to cards.
- Show the client the log in/register pages
- Show off the CEREO data that we entered into the database to replace the old placeholder data we had in before. Get approval of how it looks in the cards.
- Ask the client about MFA with the login pages
- Ask the client about the look of the website to see if they have preferences on adding a color scheme or department logo.

Meeting Notes:

- This meeting was very familiar in style to how the team-client meetings went last semester. This meeting lasted about 40 minutes in total. We started off with introductions as this was the first time Julie has met with our team this semester, and then went into a showcase of the new work that our team completed since

the last meeting. Josh showed off the download file button that is attached to each card and the log in/register pages that he made. Mitchell talked about the specifics of saving files to the backend. Sierra talked about the possibility of adding multi-factor authentication with the user accounts. The clients said that this feature is something that we can focus on adding in later. After the three of us finished talking about each of our sections we opened the meeting up to questions. Julie and Jan asked some questions about the format of the cards and linking to websites along with the "download file" button. Our team asked the client if the presentation of the website is to their liking and if they wanted to add any details regarding colors or logos and they said that a logo would look good in a spot along the top left of the header bar at the top of the web page. At the end of the meeting we talked about the timeline of the project and what we expect to show them at the next meeting. We expect to show them the website with the map included and functional from the other team because that is what they have been working on.

Action Items/Postponed-Items:

- Action Items:
    - The entire team will work on the tag filter system (ETA code review Sep 22nd)
    - The front and backend will work on logging in and authenticating users (ETA code review Sep 22nd)
- Postponed Items:
    - Deployment options and prices will be talked about later as we need more information regarding prices
    - A version of the website with the map and cards together will be shown in the next meeting because as of the current moment it is not ready.

Miscellaneous:

- We talked about the possibility of moving the weeks that we have the meetings with the client to the other set of Thursdays every other week. This would mean that we could meet with the client the following week. This could mean that in the next meeting there might be less to talk about, because until the code review with our professor we don't know how far along the other team is with integrating the map into the left side of the living atlas home page. We will get more details as the next week comes around.